

# Unit 5 - Development Economics

## Unit Overview

### 5.1 and 5.2 Sources of Economic Growth and/or Development and Consequences of Growth

- Natural factors; human factors; physical capital and technological factors; institutional factors. Externalities, income distribution and sustainability.

### 5.3 Barriers to Economic Growth and/or Development

- Poverty cycle:
  - o low incomes
  - o low savings
  - o low investment
  - o low incomes
- Institutional and political factors
  - o ineffective taxation structure
  - o lack of property rights
  - o political instability
  - o corruption
  - o unequal distribution of income
  - o formal and informal markets
  - o lack of infrastructure
- International trade barriers
  - o overdependence on primary products
  - o consequences of adverse terms of trade
  - o consequences of a narrow range of exports
  - o protectionism in international trade
- International financial barriers
  - o indebtedness
  - o non-convertible currencies
  - o capital flight
- Social and cultural factors acting as barriers
  - o religion
  - o culture
  - o tradition
  - o gender issues

[Blog posts: "Economic development"](#)

[Blog posts: "Poverty"](#)

[Blog posts: "Economic growth"](#)

[Blog posts: "Human development index"](#)

# Development Economics

## Introduction

### Economic Growth vs. Economic Development: *what's the difference?*

**Growth:** an increase in a nation's total output of goods and services measured by GDP or GDP per capita. Illustrated by an outward shift in a nation's PPC and LRAS curve.

**Development:** An improvement in the standards of living of the people of a nation, including an overall improvement in health, education, and income. May include factors such political freedom, gender equality, equality of income distribution. Can be measured using the Human Development Index (HDI), among other measures.

*What's more important, economic development or economic growth?  
Can you have one without the other?*

# Development Economics

## Characteristics of Developing Countries

A developing country may demonstrate some of or all of the following characteristics

(source: *Economics Course Companion by Blink and Dorton*):

- Low standards of living, characterized by low incomes, inequality, poor health and inadequate education.
- Low levels of productivity
- High rates of population growth and dependency burdens  
*Dependency ratio measures the ratio of the non-working age population over the working age population. The higher the ratio the more burden placed on workers in a country. Developing countries tend to have high dependency ratios due to high birth rates and low life expectancy.*
- High levels of unemployment
- Dependence on agricultural production and primary product exports
- Imperfect markets: *lacking functioning banking, regulatory and legal systems, physical and communications infrastructure.*
- Dependency on foreign developed countries for trade, access to technology, foreign investment and aid.

*What is development? Watch the video linked here to see what the data says about economic development over the last 100 years:*

[YouTube - Hans Rosling No more boring data TEDTalks](#)

[Debunking myths about the “third world” - Gapminder.org](#)

# Development Economics

## Measures of Development

*"Human development, as an approach, is concerned with what I take to be the basic development idea: namely, advancing the richness of human life, rather than the richness of the economy in which human beings live, which is only a part of it."* Prof. Amartya Sen,

Professor of Economics, Harvard University

Nobel Laureate in Economics, 1998

**What is Human Development?** *A concept of the United Nations Development Program that measures country's progress based on measures of human welfare, rather than just economic growth. Human development emphasizes:*

- **Social progress** - greater access to knowledge, better nutrition and health services.
- **Economics** - the importance of economic growth as a means to reduce inequality and improve levels of human development.
- **Efficiency** - in terms of resource use and availability. human development is pro-growth and productivity as long as such growth directly benefits the poor, women and other marginalized groups.
- **Equity** - in terms of economic growth and other human development parameters.
- **Participation and freedom** - particularly empowerment, democratic governance, gender equality, civil and political rights, and cultural liberty, particularly for marginalized groups defined by urban-rural, sex, age, religion, ethnicity, physical/mental parameters, etc.
- **Sustainability** - for future generations in ecological, economic and social terms.
- **Human security** - security in daily life against such chronic threats as hunger and abrupt disruptions including joblessness, famine, conflict, etc.

# Development Economics

## Research Activity

In order to understand the goals of economic development, it is useful to examine the characteristics of developed countries to those of developing countries.

**Activity:** With a partner, choose two countries, one from the list of countries with "High human development" and one from the list of countries with "Low human development" from the link below.

[Statistics - Human Development Reports \(UNDP\)](#)

[CIA - The World Factbook](#)

### Social Indicators:

- HDI ranking and value
- Age structure
- Population growth rate
- School life expectancy
- Life expectancy at birth
- Total fertility rate
- Education expenditures

### Economic Indicators:

- GDP per capita
- GDP - composition by sector
- Unemployment rate
- Public debt
- Stock of direct foreign investment - at home:
- Labor force - by occupation

[Blog posts: "Human development index"](#)

# Development Economics

## Research Activity

### Social Indicators

Indicator	Country with high HDI	Country with low HDI
HDI ranking and value		
Age structure (dependency ratio)		
Population growth rate:		
School life expectancy		
Life expectancy at birth:		
Total fertility rate:		
Education expenditures:		

# Development Economics

## Research Activity

### Economic Indicators

Indicator	Country with high HDI	Country with low HDI
GDP per capita		
GDP - composition by sector		
Unemployment rate		
Public debt		
Stock of direct foreign investment - at home:		
Household income or consumption by percentage share:		
Labor force - by occupation:		

# Development Economics

## Research Activity

**Dependency Ratio:** *Calculate the dependency ratios for the two country's you researched*

$$\text{Dependency Ratio} = \frac{\text{\% of population under 15 and over 64}}{\text{\% of population between 15 and 64}}$$

Country with high HD: Country with low HD:

Group 1:

Group 2:

Group 3:

Group 4:

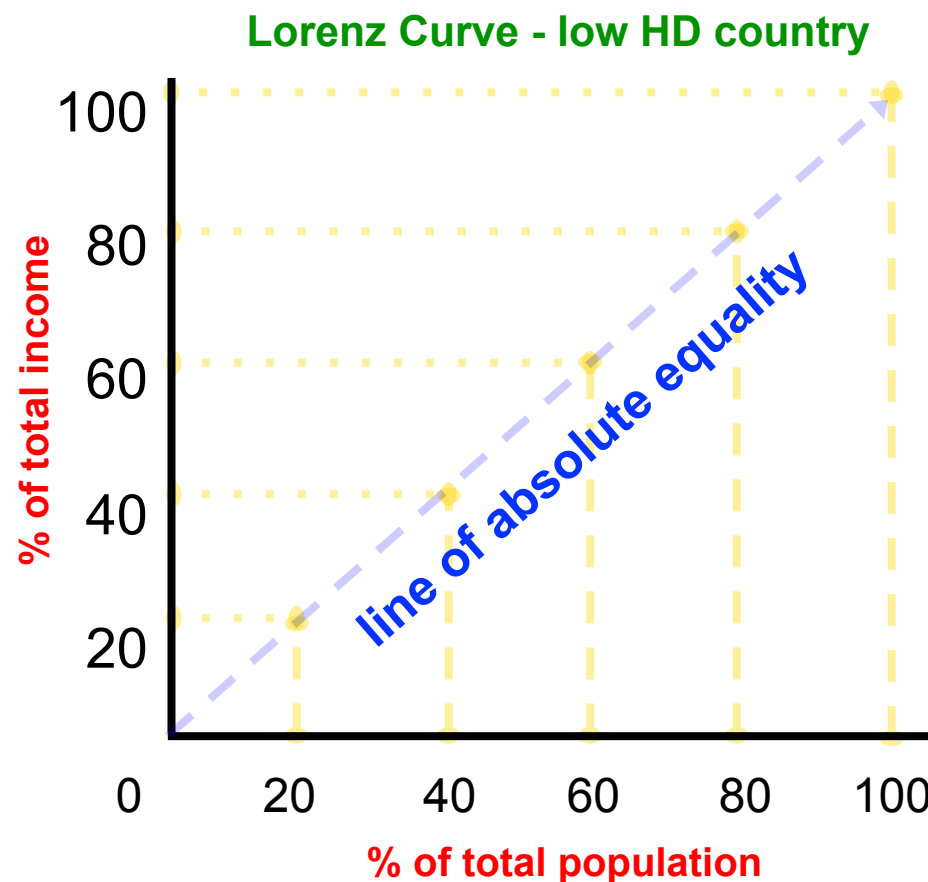
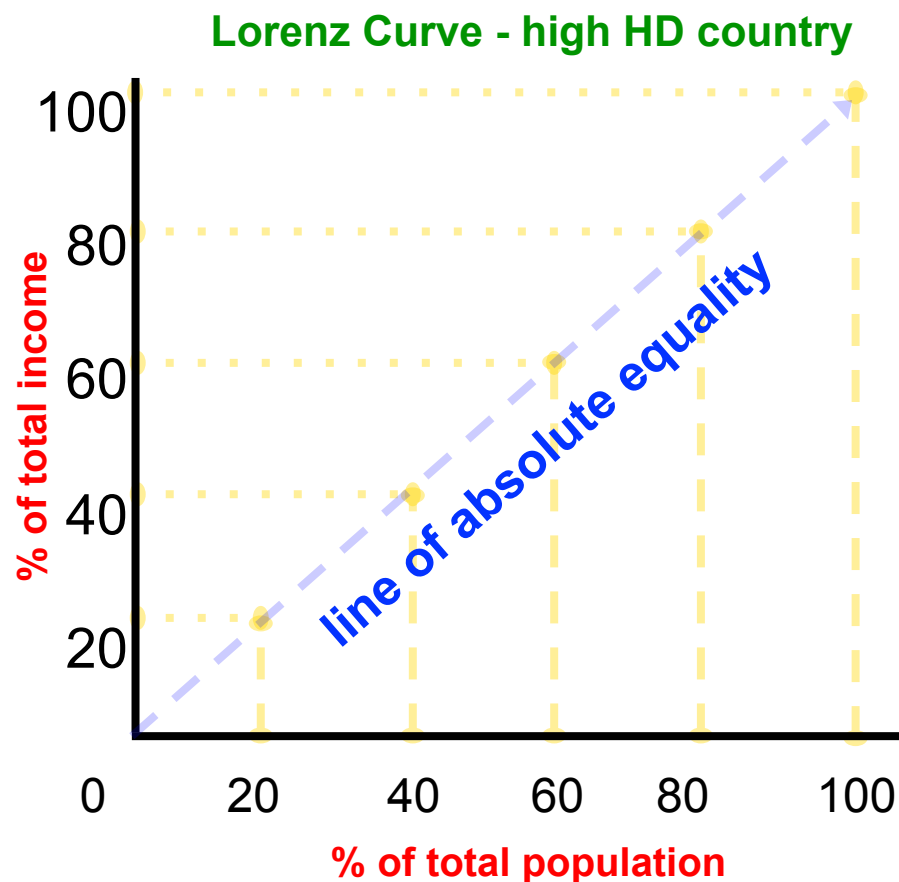
*Conclusions?*



# Development Economics

## Research Activity

**Lorenz Curve:** *The Lorenz curve is a graphical representation of the income distribution of a country. Draw a Lorenz curve for the two countries you researched.*



# Development Economics

## Research Activity

**Conclusions:** Finally, evaluate your findings from your two countries.

1. What conclusions can you draw about the correlation between GDP, HDI, income equality, social and economic indicators between developed and developing countries?
2. Does a high HDI correlate with relative income equality? What about low HDI?
3. Is a high GDP indicative of high levels of human development?
4. What other conclusions can you draw about economic development, national income, and equality?

To what extent did your country with low HD exhibit the following characteristics?

- Low standards of living
- low incomes
- inequality
- poor health
- inadequate education
- Low levels of productivity

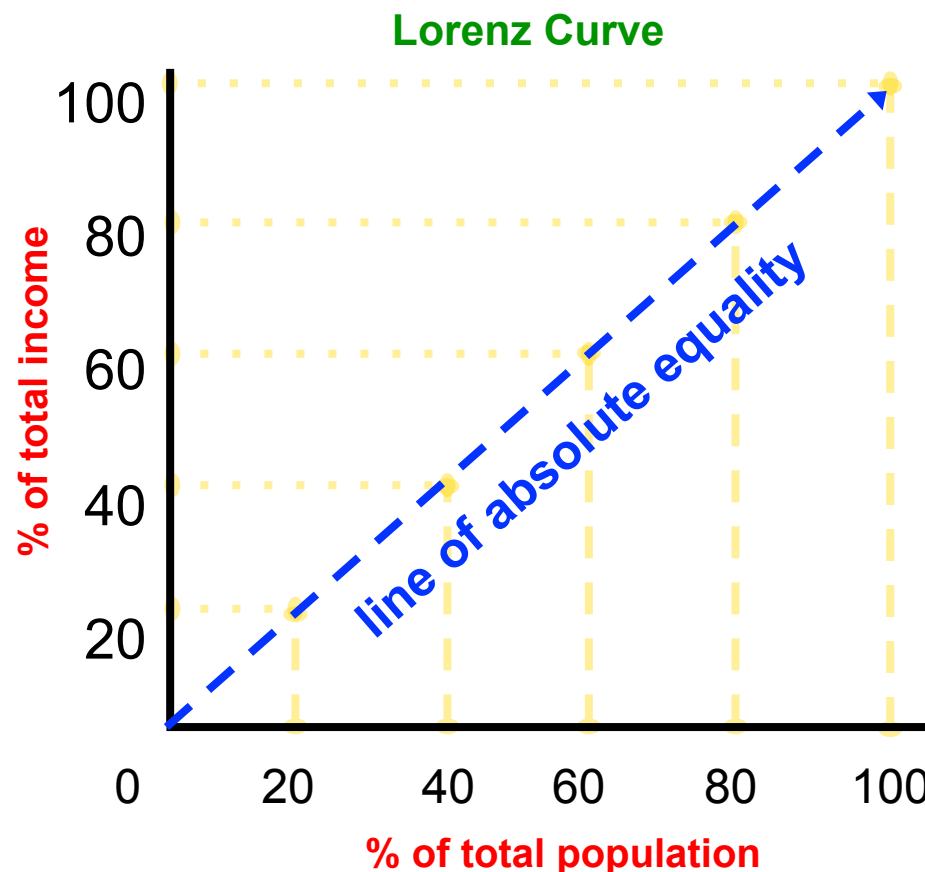
- High rates of population growth and dependency burdens
- High levels of unemployment
- Dependence on agricultural production and primary product exports
- Imperfect markets
- Dependency on foreign developed countries for trade, access to technology, foreign investment and aid.

# Development Economics

## the Lorenz Curve

### The Lorenz Curve: What is it?

- A representation of income inequality within a country
- Organizes a country's households into the richest 20% down to the poorest 20%
- Determines what percentage of national income is received by each group.
- Graphs the data with % of total income on the Y-axis, % of total population on the X-axis



Country	1st 20%	2nd 20%	3rd 20%	4th 20%	5th 20%	Gini index
Australia	5.9	12	17.2	23.6	41.3	35.2
Brazil	2.4	5.9	10.4	18.1	63.2	59.3
Croatia	8.3	12.8	16.8	22.6	39.6	29
Hungary	9.5	13.9	17.6	22.4	36.5	26.9
Sierra Leone	1.1	2.0	9.8	23.7	63.4	62.9

# Development Economics

## Quick Quiz

Poor people in less developed countries often derive little benefit from economic growth. Why might this be so?

**(Total 10 marks)**

Areas for discussion might include: the significance of the difference between economic growth and development; unequal distribution of income, wealth and power; exclusion of various poor groups from growth, *e.g.* the unemployed, rural peasants; economic growth and externalities. It should be possible to obtain full marks by explaining two relevant points well, although an answer framed entirely in terms of the existence and perpetuation of inequality could earn full marks if very well done.

**[10 marks]**

What is human capital? Explain its importance in economic development.

**(Total 10 marks)**

Again, a definition will be necessary (involving literacy, education, training, entrepreneurship *etc.*) and this will necessarily link to the provision of merit goods and the difficulties of doing this in LDCs. Students who demonstrate economic awareness by referring to particular cases or to indicators which can be used to measure the effectiveness of human capital should be well rewarded. This question involves setting a concept in a broad context, *e.g.* mentioning factors such as technological change, changes in resource allocation, investment in physical capital, or the productivity of labour, so the markscheme must be relatively open ended, with examiners free to reward the quality and feel of the answers.

**[10 marks]**

# Development Economics

## Sources of Economic Growth

**Natural factors:** anything that will increase the quantity and/or quality of a factor of production

- **Land:** reclamation, i.e. Singapore
- **Human capital:** population increase or improved health care, education, training, provision of fresh water and sanitation.

**Physical capital:** factories, machines, offices, motor vehicles, *technology; increases in quantity or quality*. Research and development, education, access to foreign technology

>> *Capital widening:* more labor and more capital - leads to increases in total production but no change in productivity

>> *Capital deepening:* more capital same amount of labor - leads to improvements in productivity

**Institutional factors:** adequate banking, legal, education systems and infrastructure, political stability, and healthy international relationships.

# Development Economics

## Consequences of Economic Growth

Some negative, some positive:

- **Higher incomes:** Per capita incomes rise w/ growth, but effects on distribution may not be clear
- **Improved economic indicators of welfare:** life expectancy, years of schooling, literacy - again, impact on different sectors of population unclear.  
>> GDP per capita is a factor in HDI - in most cases, higher GDP/capita increase HDI rating
- **Higher government revenues:** more economic activity should increase tax revenue for government
- **Creation of inequality:** as we discussed, greater wealth does not necessarily mean greater equality. Gap b/w rich and poor may widen with growth.
- **Negative externalities:** look around here in Shanghai. China's growth has come at a cost to the environment, spillover costs of growth.  
>> deforestation, soil degradation, harm to bio-diversity  
>> **Global warming:** ultimate externality -
- Some have suggested the term "**uneconomic growth**": the environmental costs of growth exceed the increases in material well-being that result

# Development Economics

## Sources of Economic Development

Some factors of growth also contribute to development:

- **Education:** creates positive externalities (spillover benefits) for society, including:

- >> improved role of women in society

- >> improved levels of health

- **Health care:** improved health care increase life expectancy.

- >> Measured as a % of GDP spent on health care.

- >> Countries that spend a higher % of GDP on health tend to have longer life expectancy, thus higher HDI ratings.

- >> Also a correlation b/w education and health

- **Infrastructure:** Includes roads, airports, sewage treatment, water systems, railways, telecommunications and other utilities necessary for economic activity.

- >> Any improvement in infrastructure will, in some way, improve well-being of people

- **Political stability:** Stable countries are more likely to attract FDI and foreign aid.

- >> Also more likely that domestic savings and profits will stay in the country.

- >> Stability generally means a more participatory role of running the country for citizens.

- >> Legal protection of property rights

# Development Economics

## Sources of Economic Development

Group 1: How do education and health care create positive externalities?

Group 2: How is the provision of infrastructure important for both economic growth and economic development?

Group 3: Explain the importance of *savings* to economic growth. Why do developing countries often have low levels of savings?

Group 4: What is *capital flight* and why is it a problem in some developing countries?



# Development Economics

## Barriers to Economic Development

**The barriers to economic development may be interconnected.** *In the circles below, identify the obstacles in each category that must be overcome to achieve development.*

Education

Health care

Institutional  
*(legal and financial)*

Tax system

Political stability

Infrastructure

Income distribution

# Development Economics

## Externalities and Economic Growth

**Lawrence Summers**

The Bank  
Memo



DATE: December 12, 1991 TO: Distribution FR: Lawrence H. Summers Subject: GEP

'Dirty' Industries: Just between you and me, shouldn't the World Bank be encouraging MORE migration of the dirty industries to the LDCs [Less Developed Countries]? I can think of three reasons:

- 1) The measurements of the costs of health impairing pollution depends on the foregone earnings from increased morbidity and mortality. From this point of view a given amount of health impairing pollution should be done in the country with the lowest cost, which will be the country with the lowest wages. I think the economic logic behind dumping a load of toxic waste in the lowest wage country is impeccable and we should face up to that.
- 2) The costs of pollution are likely to be non-linear as the initial increments of pollution probably have very low cost. I've always thought that under-populated countries in Africa are vastly UNDER-polluted, their air quality is probably vastly inefficiently low compared to Los Angeles or Mexico City. Only the lamentable facts that so much pollution is generated by non-tradable industries (transport, electrical generation) and that the unit transport costs of solid waste are so high prevent world welfare enhancing trade in air pollution and waste.
- 3) The demand for a clean environment for aesthetic and health reasons is likely to have very high income elasticity. The concern over an agent that causes a one in a million change in the odds of prostate cancer is obviously going to be much higher in a country where people survive to get prostate cancer than in a country where under 5 mortality is 200 per thousand. Also, much of the concern over industrial atmosphere discharge is about visibility impairing particulates. These discharges may have very little direct health impact. Clearly trade in goods that embody aesthetic pollution concerns could be welfare enhancing. While production is mobile the consumption of pretty air is a non-tradable.

The problem with the arguments against all of these proposals for more pollution in LDCs (intrinsic rights to certain goods, moral reasons, social concerns, lack of adequate markets, etc.) could be turned around and used more or less effectively against every Bank proposal for liberalization.

### Discussion:

- 1) On what basis does Summers argue for the pollution of developing countries?
- 2) Can pollution be "inefficiently low"?
- 3) How has pollution affected the development of a country you've researched?

# Development Economics

## Barriers to Economics Development

In the space below, identify the reasons for and the consequences of the following barriers to economic development.

### International Trade Barriers:

- overdependence on primary products
- adverse terms of trade
- narrow range of exports
- Protectionism in international trade

### International Financial Barriers:

- Capital Flight / brain drain
- Non-convertible currencies

# Development Economics

## Barriers to Economics Development

### Poverty traps:

[Paul Collier on the Bottom Billion.mp3](#)

#### Paul Collier - 4 poverty traps:

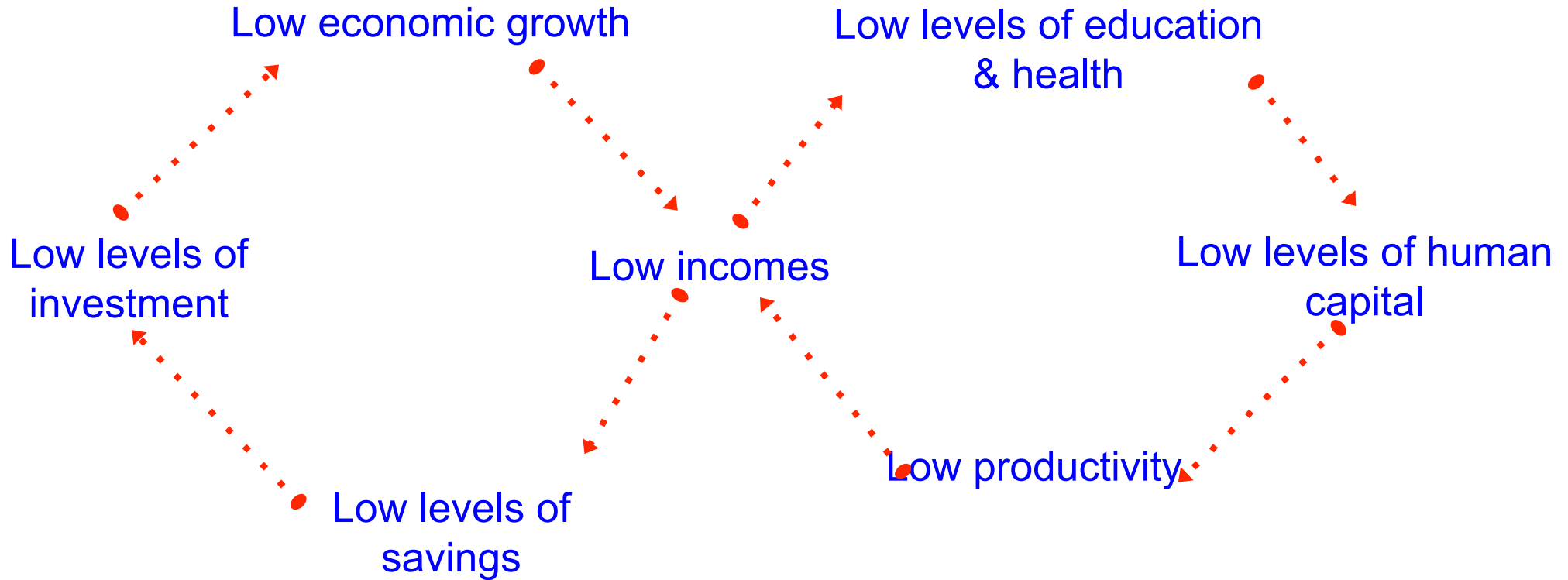
- **Conflict trap (civil war, coups, political violence)** *"development in reverse, once you stumble into these conflicts they are highly persistent"*
- **Natural resource trap (diamonds, oil, etc):** *"should be an opportunity, but in reality corrodes and corrupts the politics, in which the leaders, instead of providing the public goods the people need, compete with one another to control the public purse"*
- **Geography trap (being landlocked without natural resources):** *Options for development are extremely limited. You can't easily export goods. Around the world the most impoverished are landlocked and resource scarce.*
- **Education/governance trap:** *Small countries with poor economic policies and poor governance. Small countries with strong education get rich (Singapore) while those with bad governance and poor education stay poor (Gambia). Results in capital flight (brain drain and financial capital).*

**The poverty traps as cycles:** *With partners, brainstorm and illustrate each of the above traps as a "cycle". How does the main factor above contribute to other barriers to development, which then perpetuate themselves to keep a country poor?*

# Development Economics

## Barriers to Economics Development

### Poverty cycle:



# Development Economics

## Barriers to Economic Development

**Barriers to Economic Development:** *For the developing country's you've chosen, research the extent to which the following institutional, political, international trade, and international financial barriers hinder its economic growth and/or development:*

TRAPS	Countries that fall into the traps
<b>International Trade Barriers:</b> <ul style="list-style-type: none"><li>·overdependence on primary products</li><li>·narrow range of exports</li><li>·Protectionism in international trade</li></ul>	
<b>International Financial Barriers:</b> <ul style="list-style-type: none"><li>·Indebtedness</li><li>·Capital Flight</li><li>·Non-convertible currencies</li></ul>	
<b>Conflict:</b> <ul style="list-style-type: none"><li>·civil war</li><li>·racial, religious tensions</li><li>·political violence</li></ul>	
<b>Geography:</b> <ul style="list-style-type: none"><li>·Landlocked</li><li>·Resource scarce</li><li>·Hostile neighbors</li></ul>	
<b>Institutional and Political Barriers</b> <ul style="list-style-type: none"><li>·provision of education/health care</li><li>·the extent,quality of infrastructure</li><li>·financial services/banking system</li><li>·legal system</li><li>·political stability</li><li>·extent of corruption</li></ul>	

# Development Economics

## Barriers to Economic Development

*"Economic growth and environmental sustainability are incompatible goals"*

Discuss, then read: "How Green is Their Growth" from *the Economist*

- Which countries are the leaders in environmental sustainability?
- Why are some rich countries low in the rankings (like Belgium and Taiwan) while some poor countries are high in the rankings (like Uruguay and Guyana)?
- What is the relationship between environmental sustainability and economic development?

## Statistics and Economic Development

- Hans Rosling - Swedish professor of International Health
- "Gapminder" software for analyzing human welfare data
- Watch videos
- Continue research on your chosen developing countries using Gapminder software

<http://www.gapminder.org/>